Results: 2854 patients treated with heparins were included. The risk of major bleeding or transfusion (3.0% vs. 7.0%) and in-hospital death (3.2% vs 9.2%) was lower with LMWH compared with UFH, a difference that persisted after multivariate adjustment (OR=0.51, 95% CI: 0.34-0.76 and OR=0.53, 95% CI: 0.37-0.76, respectively). Three-year survival and stroke and reinfarction-free survival were also higher with LMWH compared with UFH (adjusted HR =0.73, 95% CI: 0.61-0.86 and HR =0.73, 95% CI: 0.62-0.85, respectively). In two cohorts of patients matched on a propensity score for getting LMWH and with similar baseline characteristics (834 patients per group), major bleeding and transfusion were lower while three-year survival was significantly higher in patients receiving LMWH.

Conclusion: The present data suggest that the use of LMWH in AMI patients may have a better benefit/risk profile than UFH with in terms of bleeding, need for transfusion, and long term survival.

010

Prediction of long-term survival in patients receiving optimal secondary prevention therapy after acute myocardial infarction: the FAST-MI registry

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Background: Predictors of long-term outcome in optimally-treated patients after AMI have not been extensively studied.

Aim: We assessed 3-year survival in a population of 3,262 patients from the FAST-MI registry who were discharged alive after the acute episode.

Results: At hospital discharge, 1586 patients (49%) received optimal medical treatment (OMT: antiplatelet + beta-blocker + statin + ACE-I or ARB agents). Patients receiving OMT were younger (64±13 vs 69±14 years, p<0.001), had a lower GRACE risk score (141 ±33 vs 151±36, p<0.001)and had more use of PCI during index hospitalization (75% vs 56%,p<0.001). Three-year survival was 88% in patients with OMT versus 77.5% in patients without (p<0.001). Cox multivariate analysis was used to determine predictors of 3-year mortality and covariates included age, sex, risk factors, comorbidities, type of AMI, CAD extent, use of PCI, use of CABG, in-hospital complications, and other discharge medications. Overall, adjusted HR for 3-year death was 0.82 (0.68-1.00), p=0.048, for patients receiving OMT, confirming the benefit of comprehensive therapy beyond each of its individual components. In the 1586 patients receiving OMT at discharge, independent predictors of long-term death were age ≥75 years [HR 1.93 (1.03-3.64)]; AMI type and severity [STEMI vs NSTEMI: HR 0.64 (0.44-0.93); GRACE score: HR 1.01 (1.00-1.01); LVEF< 40%: HR 2.03 (1.31-3.16); 3-vessel CAD: HR 2.12 (1.28-3.52)]; previous CV history [stroke: HR 1.91 (1.29-2.83), CHF: HR 1.79 (1.11-2.88)]; management with an invasive strategy [HR 0.31 (0.17-0.56)], and associated conditions [history of diabetes HR 1.79 (1.28-2.49); history of cancer HR 2.76 (1.75-4.33); current smoking at the time of AMI HR 1.88 (1.20-2.94)].

Conclusion: In patients receiving OMT after AMI, early invasive management remains a significant predictor of improved survival, while associated non cardiac conditions (and in particular cancer, diabetes, previous TIA or stroke, and smoking) are major determinants of higher long-term mortality.

011

The major part of one-year prognosis of acute coronary syndromes is associated with the severity of the initial clinical presentation – Results from the French MONICA registries

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Purpose: Death rate of acute coronary syndromes has decreased for more than 50 years. Out-of-hospital mortality remains high despite improvements in acute coronary syndrome's care.

Aims: To evaluate the importance of out-of-hospital mortality and the main determinants of in-hospital and one-year mortality in France.

Methods: Analyses were based on data from the French MONICA population-based registry including exhaustively all acute coronary syndromes occurring in people aged 35-74 during the year 2006 in 3 geographic areas. First we evaluated out-of-hospital mortality. Then analyses were performed through Cox models on incident ACS reaching the hospital alive in order to determine main factors explaining the one-year mortality. Number of attributable deaths was assessed for variables of interest.

Results: After a one-year follow-up, case-fatality was 29.3% for incident events (n=2547) with 70.3% of out-of-hospital deaths and 21.1% occurring in the 28 days following the event. The number of attributable deaths related to 3 situations with a strong impact identified from multivariate analyses (out-of-hospital life-and-death emergency, hospitalization before ACS occurrence, and lack of coronary angiography) was 130 (59% of deaths occurring after reaching the hospital) during the one-year follow-up. These sub-groups were corresponding to patients with an important initial state of severity and not benefiting from traditionally recommended treatments.

Conclusion: The major part of deaths after ACS occurs in the out-of-hospital phase. Moreover, the major part of one-year mortality is associated with a very poor prognosis before medicalization. This underlines the importance of cardiovascular prevention, population education and better out-of-hospital emergency management.

012

Use of invasive strategy in non-ST-elevation myocardial infarction is a major determinant of improved long-term survival. The FAST-MI registry

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Objectives: We assessed the impact of invasive strategy (IS) versus a conservative strategy (CS) on in-hospital complications and three-year outcomes in patients with Non-ST-Elevation Myocardial Infarction (NSTEMI) from the FAST-MI registry.

Background: Results from randomized trials comparing IS and CS in patients with NSTEMI are conflicting.

Methods: Of the 3,670 patients in the FAST-MI registry, which included patients with acute myocardial infarction (within 48 hours) over a one-month period in France at the end of 2005, 1,645 presented with NSTEMI.

Results: Of the 1,645 patients analyzed, 80% had an IS. Patients in the IS group were younger (67±12 vs. 80±11 years), less often women (29% vs. 51%) and had a lower GRACE risk score (137±36 vs. 178±34) as compared with patient treated with CS. In-hospital mortality and blood transfusions were significantly more frequent in patients with CS as compared with IS (13.1 vs. 2.0%, 9.1 vs. 4.6%). Use of IS was associated with a significant reduction in 3-year mortality and cardiovascular death (17% vs. 60%, adjusted HR: 0.44; 95%CI: 0.35-0.55 and 8% vs. 36%, adjusted HR: 0.37; 95%CI: 0.27-0.50).